Report Date: 19 Nov 2014

Summary Report for Individual Task 091-94R-1601 Repair Laser Detecting Set AN/AVR-2(\*) Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

**Destruction Notice:** None

Foreign Disclosure: FD6 - This product/publication has been reviewed by the product developers in coordination with the FT.LEE/CASCOM foreign disclosure authority. This product is releasable to students from foreign countries on a case-by-case basis.

**Condition:** You are in an Operational Environment (OE), with a non-mission capable Laser Detecting Set An/AVR-2 (\*) that has been submitted to the Shop along with DA Form 2407, Maintenance Request and DA Form 2404, Equipment Inspection and Maintenance Worksheet. Your supervisor has assigned the work order to you for repair. At your workstation you have the following items: Test Set TS-4321; Electronic Equipment Tool Kit TK-105/G; Oscilloscope AN/USM-488; Digital Multimeter, AN/PSM-45A; torque wrench, 1/4-inch drive, 0-25 inch-pounds; torque wrench, 1/4-inch drive, 0-32 inch-pounds; TM 11-5841-301-30-1 and TM 11-5841-301-23P; DA Form 2404; DA Form 2407; and DA PAM 738-751 Functional Users Manual for the Army Maintenance Management System Aviation. NOTE: Substitutions for equipment may be made in accordance with test equipment modernization (TEMOD) publications. Some iterations of this task should be performed in MOPP 4.

**Standard:** Restore the Laser Detecting Set AN/AVR-2(\*) to fully mission capable per TM 11-5841-301-30-1 and TM 11-5841-301-23P. Complete DA Form 2407 in accordance with DA Pam 738-751 without error.

Special Condition: None

Safety Risk: Low

MOPP 4: Sometimes

### **Task Statements**

**Cue:** Your supervisor has given you a non-mission capable AN/AVR-2(\*) that was submitted to your shop with a DA Form 2407 and directed you to repair and complete the form to standard.

# None WARNING None

# **CAUTION**

Do not be misled by the term low voltage. Potentials as low as 28 volts may cause death under adverse conditions.

Avoid viewing the laser source at close range. Since the emitted beam is not collimated, increasing the distance to the laser source greatly reduces the risk of over exposure.

MAKE SURE POWER IS OFF BEFORE REMOVING OR INSTALLING ANY COMPONENTS TO AVOID POSSIBLE PERSONNEL INJURY OR EQUIPMENT DAMAGE.

THE CIRCUIT CARD ASSEMBLIES IN THE AN/AVR-2 LASER DETECTING SET CONTAIN COMPONENTS SENSITIVE TO DAMAGE BY ELECTROSTATIC DISCHARGE. USE ELECTROSTATIC DISCHARGE PRECAUTIONARY PROCEDURES WHEN TOUCHING, REMOVING, OR INSERTING THE CIRCUIT CARD ASSEMBLIES.

Remarks: None

Notes: None

# **Performance Steps**

- 1. Obtain all required tools, test equipment and reference materials.
- 2. Complete appropriate blocks on DA Form 2407 per DA Pam 738-751.
- 3. Perform visual inspection.
- 4. Set up test equipment per TM 11-5841-301-30-1.
- 5. Verify faults listed on DA Form 2407 using appropriate troubleshooting chart per TM 11-5841-301-30-1.
- 6. Perform troubleshooting on the AN/AVR-2(\*) using the troubleshooting chart in TM 11-5841-301-30-1.
- 7. Identify defective component (s) per TM 11-5841-301-30-1 and TM 11-5841-301-23P.
- 8. Replace defective component (s) with operational ones per TM 11-5841-301-30-1 and TM 11-5841-301-23P.
- 9. Perform operational checks per TM 11-5841-301-30-1.
- 10. Complete appropriate blocks on DA Form 2407 per DA Pam 738-751.
- 11. Tag defective component (s) for turn-in per DA Pam 738-751.
- 12. Notify supervisor upon completion of task.

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show the Soldier what was done wrong and how to do it correctly.

**Evaluation Preparation:** Ensure all items required in the condition statement (or appropriate substitutions) are on hand and all safety requirements are met.

PERFORMANCE MEASURES	GO	NO-GO	N/A
Obtained all required tools, test equipment, and reference materials.			
2. Completed appropriate blocks on DA Form 2407 per DA Pam 738-751.			
3. Performed visual inspection TM 11-5841-301-1.			
4. Properly set up test equipment per TM 11-5841-301-30-1.			
5. Verified faults listed DA Form 2407 using appropriate troubleshooting chart in TM 11-5841-301-30-1.			
6. Performed troubleshooting procedures on the AN/AVR-2(*)using the troubleshooting chart in TM 11-5841-301-30-1.			
7. Identified defective component (s) per TM 11-5841-301-30-1 and TM 11-5841-301-23P.			
8. Replaced defective component (s) per TM 11-5841-301-30-1 and TM 11-5841-301-23P.			
9. Performed operational checks per TM 11-5841-301-30-1.			
10. Completed appropriate blocks on DA Form 2407 per DA Pam 738-751.			
11. Tagged defective component (s) for turn-in per DA Pam 738-751.			
12. Notified supervisor upon completion of task.			

## **Supporting Reference(s):**

Step Number	Reference ID	Reference Name	Required	Primary
	DA FORM 2404	EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET	Yes	No
	DA FORM 2407	MAINTENANCE REQUEST	Yes	No
	PAM 738-751	FUNCTIONAL USER'S MANUAL FOR THE ARMY MAINTENANCE MANAGEMENT SYSTEM-AVIATION (TAMMS-A) http://www.apd.army.mil/pdffiles/p738_ 751.pdf	No	No
	TM 11-5841-301- 23P	AVIATION UNIT AND AVIATION INTERMEDIATE MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST FOR LASER DETECTING SET AN/AVR-2 (NSN 5841-01-110-6665) (EIC: KDW) {NAVAIR 16-30AVR2-3}	Yes	No
	TM 11-5841-301- 30-1	AVIATION INTERMEDIATE MAINTENANCE MANUAL FOR LASER DETECTING SET AN/AVR-2 (NSN 5841-01-110-6665) (EIC: KDW) {NAVAIR 16-30AVR2-2}	Yes	No

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. In an operational environment, it is the responsibility of the Soldier and DA Civilians to protect the environment from damage.

All operations must conform to the Army Environmental Program, TC 3-34.489 (The Soldier and the Environment), FM 3-100.4 (Environmental Consideration in Military Operations), and local, state, and federal environmental policies, the Clean

Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), as well as Occupational Safety and Health Administration (OSHA), Hazard Communication Standard for Industry, 29 CFR, part 1910.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. Incidental to Army operations and activities, all operations must provide for public safety, safe and healthful workplaces, procedures and equipment. Observe all safety precautions when using lifting devices and handling heavy parts. Observe all safety and/or environmental precautions regarding electricity, radiation, radio frequency (RF), fuel lubricants, high pressures, and refrigerants. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required IAW AR 385-10, The Clean Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), and the OSHA Hazard Communication standard.

Prerequisite Individual Tasks: None Supporting Individual Tasks: None Supported Individual Tasks: None Supported Collective Tasks: None